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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,629	01/05/2004	Yong-Jun Kwak	678-1334	2454

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EXAMINER	
KHAN, SUHAIL	
ART UNIT	**PAPER NUMBER**
2686	

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/751,629	KWAK ET AL.	
	Examiner	Art Unit	
	Suhail Khan	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *1/5/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/7/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-24 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5991618 to Hall.

Referring to **claim 1**, Hall discloses a method for determining a data rate of a user equipment (UE) (col 2 line 55 – col 3 line 10, data rate; col 7, lines 15-22, calculating communication mode quality) for an enhanced uplink dedicated channel (EUDCH) (col 3, lines 5-10, high data rate channel; col 3, lines 46-52, subscriber unit sending message to communication system infrastructure, hence uplink) service by a Node B (Figure 2, Base Station is interpreted as being Node B) in a mobile communication system having a radio network controller (RNC) (Figure 2, Base Station Controller is interpreted as being RNC), the UE transmitting UE transmission power class information to the RNC (col 7, lines 15-22, power margin is interpreted as being the transmission power class information), and the Node B supporting the EUDCH service of the UE (col 3, lines 5-10, high data rate channel), the method comprising the steps of: receiving uplink channel condition information of the UE from the UE (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information), and receiving UE transmission power class information from the RNC (col 7, lines 15-22, power margin is interpreted as being the transmission power class

information); and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the uplink channel condition information (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information) and the total transmission power (col 6, lines 30-34, maximum power value).

Referring to **claim 2**, Hall discloses the method of claim 1, wherein the uplink channel condition information of the UE is transmission power information of the UE (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information and hence the transmission power information).

Referring to **claim 3**, Hall discloses the method of claim 2, further comprising the step of calculating transmission power margin information of the UE using the total transmission power and the transmission power information (col 6, lines 26-34, power margin value calculated using power measurement and maximum power value), and determining a data rate (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) of the UE based on the transmission power information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power 'information') and the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information).

Referring to **claim 4**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having a radio network controller (RNC), the UE transmitting UE transmission power class information to the RNC, and the Node B supporting the EUDCH

service of the UE, the method comprising the steps of: receiving transmission power margin information of the UE from the UE (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information), and receiving UE transmission power class information from the RNC (col 7, lines 15-22, power margin is interpreted as being the transmission power class information); and determining a data rate (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) of the UE considering the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information) and the total transmission power (col 6, lines 30-34, maximum power value).

Referring to **claim 5**, Hall discloses the method of claim 4, further comprising the step of calculating transmission power information of the UE using the total transmission power and the transmission power margin information (col 6, lines 26-34, power margin value calculated using power measurement and maximum power value), and determining a data rate of the UE based on the transmission power information and the transmission power margin information (col 2 line 55 – col 3 line 10, data rate; col 7, lines 15-22, calculating communication mode quality using power margin requirement and power margin).

Referring to **claim 6**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of: receiving uplink channel condition information of the UE () and UE transmission power class information from the UE (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information); and

determining a data rate (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) of the UE considering the uplink channel condition information (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information) and the total transmission power (col 6, lines 30-34, maximum power value).

Referring to **claim 7**, Hall discloses the method of claim 6, wherein the uplink channel condition information of the UE is transmission power information of the UE (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information and hence the transmission power information).

Referring to **claim 8**, Hall discloses the method of claim 7, further comprising the step of calculating transmission power margin information of the UE using the total transmission power and the transmission power information (col 6, lines 26-34, power margin value calculated using power measurement and maximum power value), and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) based on the transmission power information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power information) and the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information).

Referring to **claim 9**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (ELJDCH) service by a Node B in a mobile communication system having the UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of: receiving transmission power margin information of the UE (col 3, lines 34-37, power margin requirement is interpreted as being the transmission

power margin information) and UE transmission power class information from the UE (col 7, lines 15-22, power margin is interpreted as being the transmission power class information); and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information) and the total transmission power (col 6, lines 30-34, maximum power value).

Referring to **claim 10**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE transmitting UE transmission power class information to a radio network controller (RNC), and the Node B supporting the EUDCH service of the UE, the method comprising the steps of: receiving uplink channel condition information of the UE from the UE (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information), and receiving total transmission power of the UE from the RNC (col 6, lines 30-34, maximum power value); and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the received uplink channel condition information (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information) and total transmission power (col 6, lines 30-34, maximum power value).

Referring to **claim 11**, Hall discloses the method of claim 10, wherein the uplink channel condition information of the UE is transmission power information of the UE (col 3, lines 34-37,

power margin requirement is interpreted as being the uplink channel condition information and hence the transmission power information).

Referring to **claim 12**, Hall discloses the method of claim 11, further comprising the step of calculating transmission power margin information of the UE using the total transmission power and the transmission power information (col 6, lines 26-34, power margin value calculated using power measurement and maximum power value), and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) based on the transmission power information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power information) and the transmission power margin information (col 2 line 55 – col 3 line 10, data rate; col 7, lines 15-22, calculating communication mode quality using power margin requirement and power margin).

Referring to **claim 13**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE transmitting UE transmission power class information to a radio network controller (RNC), the Node B supporting the EUDCH service of the UE, the method comprising the steps of: receiving transmission power margin information of the UE from the UE (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information), and receiving total transmission power from the RNC (col 6, lines 30-34, maximum power value); and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the transmission power margin information (col 3, lines 34-37, power margin

requirement is interpreted as being the transmission power margin information) and the total transmission power (col 6, lines 30-34, maximum power value).

Referring to **claim 14**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of: receiving at the Node B transmission power information (col 6, lines 26-34, power margin value calculated using power measurement and maximum power value) and transmission power margin information of the UE from the UE (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information); and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the transmission power information (col 6, lines 26-34, power margin value calculated using power measurement and maximum power value) and the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information).

Referring to **claim 15**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having a radio network controller (RNC), the UE transmitting UE transmission power class information to the RNC, and the Node B supporting the EUDCH service of the UE, the method comprising the steps of: receiving uplink channel condition information of the UE from the UE (col 7, lines 15-22, power margin is interpreted as being the transmission power class information), and receiving maximum allowed uplink transmission

power information of the UE from the RNC (col 7, lines 11-15, maximum transmit power); and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the received uplink channel condition information (col 7, lines 15-22, power margin is interpreted as being the transmission power class information) and maximum allowed uplink transmission power information (col 7, lines 11-15, maximum transmit power).

Referring to **claim 16**, Hall discloses the method of claim 15, wherein the uplink channel condition information of the UE is transmission power information of the UE (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information and hence the transmission power information).

Referring to **claim 17**, Hall discloses the method of claim 16, further comprising the step of calculating transmission power margin information of the UE using the maximum allowed uplink transmission power information and the transmission power information (col 7, lines 10-15, power margin using maximum transmit power and measured transmit power), and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the transmission power information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power information) and the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information).

Referring to **claim 18**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having a radio network controller (RNC), the UE transmitting UE

transmission power class information to the RNC, and the Node B supporting the EUDCH service of the UE, the method comprising the steps of: receiving transmission power margin information of the UE from the UE (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information), and receiving maximum allowed uplink transmission power information of the UE from the RNC (col 7, lines 11-15, maximum transmit power); and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the received transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information) and maximum allowed uplink transmission power information (col 7, lines 11-15, maximum transmit power).

Referring to **claim 19**, Hall discloses the method of claim 18, further comprising the step of calculating transmission power information of the UE using the maximum allowed uplink transmission power information and the transmission power margin information (col 6, lines 26-34, power margin value calculated using power measurement and maximum power value; col 7, lines 11-15, maximum transmit power; col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information), and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the transmission power information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power information) and the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information).

Referring to **claim 20**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of: receiving uplink channel condition information of the UE from the UE (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information), and receiving maximum allowed uplink transmission power information (col 7, lines 11-15, maximum transmit power) and UE transmission power class information from the RNC (col 7, lines 15-22, power margin is interpreted as being the transmission power class information); and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering information having a smaller value out of the maximum allowed uplink transmission power information (col 7, lines 15-20, power margin has a smaller value than maximum allowed uplink transmission power) and the total transmission power information (col 6, lines 30-34, maximum power value), and the uplink channel condition information (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information).

Referring to **claim 21**, Hall discloses the method of claim 20, wherein the uplink channel condition information of the UE is transmission power information of the UE (col 3, lines 34-37, power margin requirement is interpreted as being the uplink channel condition information and hence the transmission power information).

Referring to **claim 22**, Hall discloses the method of claim 21, further comprising the step of calculating transmission power margin information of the UE using information having a value less than the maximum allowed uplink transmission power information (col 7, lines 15-20,

power margin is a value less than maximum allowed uplink transmission power) and the total transmission power information (col 6, lines 30-34, maximum power value), and the transmission power information (col 7, lines 11-15, power margin shows using maximum transmit power and measured transmit power), and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering the transmission power information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power information) and the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information).

Referring to **claim 23**, Hall discloses a method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of: receiving at the Node B transmission power margin information of the UE from the UE (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information), and receiving at the Node B maximum allowed uplink transmission power information (col 7, lines 11-15, maximum transmit power) and UE transmission power class information from the RNC (col 7, lines 15-22, power margin is interpreted as being the transmission power class information); and determining a data rate of the UE (col 7, lines 15-22, calculating communication mode quality, col 2 line 55 – col 3 line 10, data rate) considering information having a value less than the maximum allowed uplink transmission power information (col 7, lines 15-20, power margin is a value less than maximum allowed uplink transmission power) and the total transmission power information (col 6, lines

30-34, maximum power value), and the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information).

Referring to **claim 24**, Hall discloses the method of claim 23, further comprising the step of calculating transmission power information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power information) of the UE using information having a value less than the maximum allowed uplink transmission power information (col 7, lines 15-20, power margin is a value less than maximum allowed uplink transmission power) and the total transmission power information (col 6, lines 30-34, maximum power value), and the transmission power margin information, and determining a data rate of the UE considering the transmission power information and the transmission power margin information (col 3, lines 34-37, power margin requirement is interpreted as being the transmission power margin information and the transmit power 'information').

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to Determining Data Rate for Uplink Channel.

U.S. Pat. No. 6600903 to Lilja et al.

U.S. Pat. App. Pub. No. 2002/0168994 to Terry et al.

U.S. Pat. No. 6859446 to Gopalakrishnan et al.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suhail Khan whose telephone number is (571) 272-7910. The examiner can normally be reached on M-F from 8 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached at (571) 272-7905.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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N.
CHARLES APPIAH
PRIMARY EXAMINER